



Docket No. 12465US01

Amendment for Ser. No. 09/609,578
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a Hall effect sensor positioned inside said switch housing; and
a magnet carriage positioned inside said switch housing, said magnet carriage
movable along a first longitudinal axis relative to said Hall effect sensor and including a
first magnet and a second magnet, said first and second magnets facing said Hall effect
sensor, being in contact with each other, and each having a respective longitudinal axis
that extends generally perpendicular to the first longitudinal axis;
said Hall effect sensor responsive to the positional displacement of said first and
second magnets relative to said Hall effect sensor.

8. The Hall effect switch of claim 10 further comprising a boot seal between
said switch housing and said magnet carriage.

9. The Hall effect switch of claim 10 further comprising a return spring for
biasing the positional displacement of said magnet carriage.

10. A Hall effect switch comprising:
a switch housing;
a Hall effect sensor positioned inside said switch housing;
a magnet carriage positioned inside said switch housing, said magnet carriage
movable relative to said Hall effect sensor and having a first magnet and a second

magnet, said first magnet and said second magnet positioned with opposing polarities facing said Hall effect sensor; and

a clicker ball and a clicker ball aperture, said clicker ball being displaced from a non-actuated position to an actuated position by the positional displacement of said magnet carriage and thereby emitting a perceivable clicking indication;

said Hall effect sensor responsive to the positional displacement of said first and second magnets relative to said Hall effect sensor.

11. The Hall effect switch of claim 10 wherein said first and second magnets are positioned in contact with each other.

12. The Hall effect switch of claim 10 further comprising at least one additional magnet in said magnet carriage positioned similarly to said first and second magnets.

13. A method for contactless switching in a switch housing including a Hall effect sensor and a magnet carriage, said method comprising:

mechanically displacing a magnet carriage along a first longitudinal axis, the magnet carriage having a first magnet and a second magnet, said first and second magnets positioned with opposite polarities facing a Hall effect sensor, being in contact